

ABSTRACT

The present invention discloses an apparatus and method for microbial intervention and pasteurization of food or equipment comprising a chamber, steam generator, superheater, controller, timer, power source, and temperature sensor. The temperature sensor and timer control exposure of the food or equipment to the superheated steam. After steam application, the food or equipment may be bathed by a chilled water source. The method for microbial intervention and pasteurization of the food and/or equipment surface includes: placing food or equipment in the chamber, adding superheated steam to the chamber until the surface temperature of the food or equipment is greater than a first preselected temperature, and maintaining the surface temperature by the continued application of superheated steam until the surface temperature is greater than a second preselected temperature.